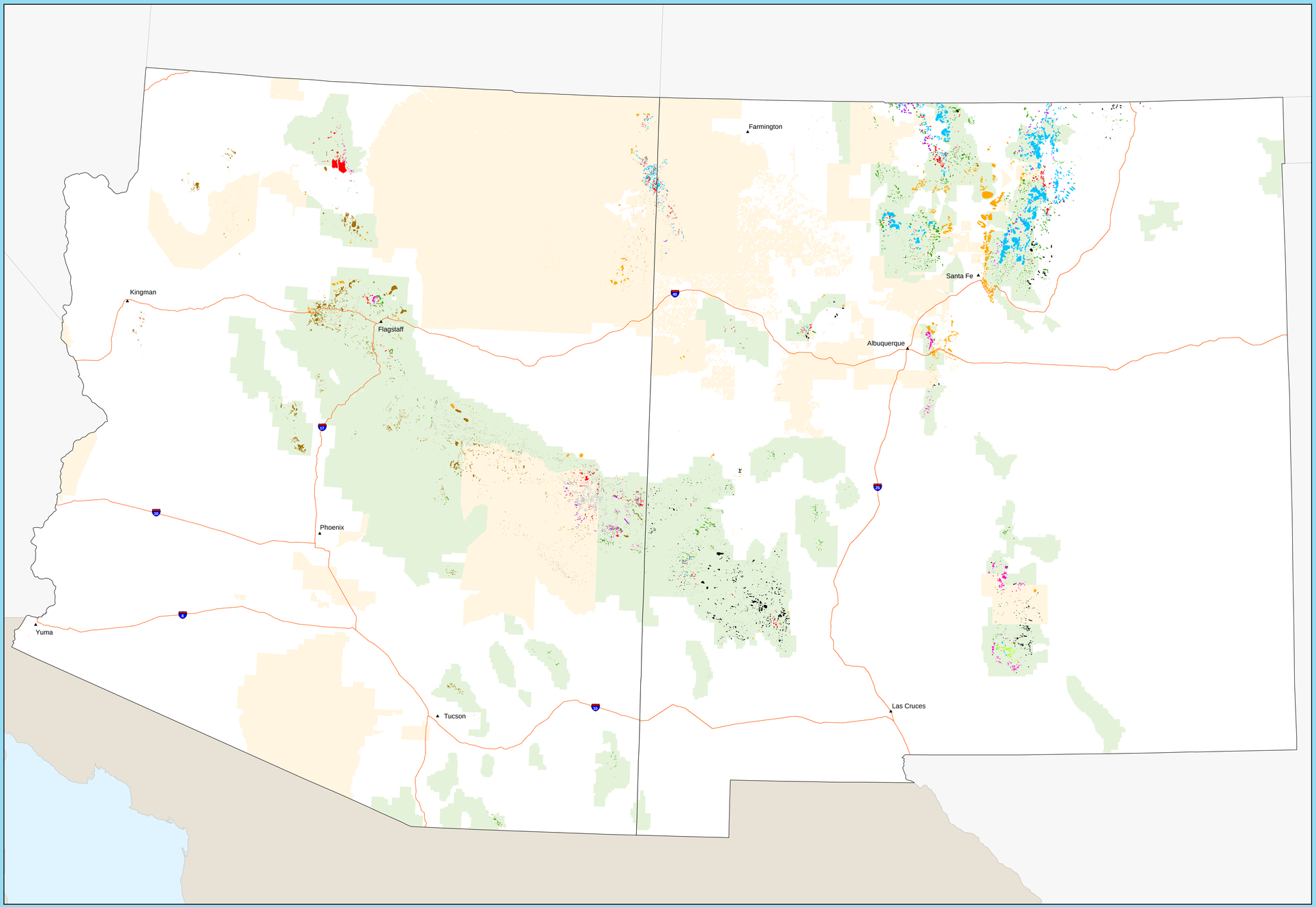

National Forest lands

Tribal lands

Damage Agent*

- Ips engraver on ponderosa pine
- Western pine beetle
- Piñon ips
- Spruce beetle
- Douglas-fir beetle
- True fir mortality from bark beetles
- Western spruce budworm defoliation
- Aspen defoliation
- New Mexico fir looper
- Spruce aphid

**Only agents affecting greater than 5,000 acres Region-wide are depicted.*

N W E S

0 25 50 100 150 Miles

The insect and disease activity depicted here is based on aerial detection surveys and should only be used as a general indicator of incidence. This map represents the mortality and defoliation that has occurred since the previous surveys in 2003. Depending upon the timing of survey, the entire extent of some insect and disease activity may not have been detected. In addition, most diseases cause gradual declines in tree health that are not typically detectable during aerial surveys. Intensity of damage is variable, thus not all trees within a mapped area are dead or defoliated. Caution should be used in interpreting these results due to the subjective nature of aerial sketch mapping and the scale of mapping. Areas of particular concern should be ground-checked for precise determination of location and causal agent.

Arizona

Survey conducted July through September, 2004, by Steve Dudley and Bobbe Fitzgibbon, Forest Health, Arizona Zone Office, Southwestern Region, USDA Forest Service; Tom DeGomez, University of Arizona, Arizona Forest Health Program.

New Mexico

Survey conducted June through August, 2004 by Richard Norris and Daniel Ryerson, Forest Health, New Mexico Zone Office, Southwestern Region, USDA Forest Service; Stephani Sandoval, New Mexico State University Cooperative Extension Service. Additional surveys for piñon mortality conducted August through October by Terry Rogers and Daniel Ryerson, Forest Health, New Mexico Zone Office, Southwestern Region, USDA Forest Service; Todd Haines, New Mexico Forestry Division; Stephani Sandoval, New Mexico State University Cooperative Extension Service.

Significant Forest Mortality and Defoliation Detected through Aerial Survey

Southwestern Region - 2004

FOREST SERVICE USDA DEPARTMENT OF AGRICULTURE

Forest Health
December 9, 2004